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THE COST OF LIVING IN ROMAN EGYPT

BY LOUIS C. WEST

The material here presented has been gathered in a search after evidence relating to the exchange of commercial products between the different provinces of the Roman Empire, a work still uncompleted.

While having little, if any, direct connection with the larger problem, the facts gathered together in the accompanying tables are interesting and valuable, for they show clearly the conditions under which one part of the Empire lived and worked; they also show the nature of the objects which entered most largely into the internal trade of Egypt.

The lists of articles with their prices are in large part self-explanatory, and accordingly no attempt will be made here to do more than emphasize in a general way the main points of interest. This will be done by considering the material from two different points of view; in the first place by dividing it into chronological periods, so that the relationship of prices within each period and in comparison with other periods may be seen; in the second place by selecting some commodity other than money as the standard of value, and on this basis considering the relation of prices to the wages of labor. Finally, an attempt will be made to compare the prices in the papyri of the early fourth century with those in Diocletian's edict and to point out how far our opinion of that edict is affected by the comparison.

In the way of a thorough understanding of all the information offered by these prices there is at present one great difficulty: i.e., the impossibility of determining the exact value of the coins mentioned in the papyri. But despite this, many interesting facts are clear, and there is always the hope that new discoveries will lead to a more exact determination of the money values.

It is tempting to draw comparisons between the ancient Egyptian workman and our own American workman, but as such comparisons are usually misleading, none will be made here. A workman in this country earning \$2.00 per day when wheat is \$1.00 per bushel is

not five times better off than the ancient workman earning 20 cents a day when wheat was 50 cents a bushel. The difference in social standards and in climate compels our workman to spend more on his food, both in quality and quantity, on his clothing, on protection against the weather, on amusements, education, medicine, insurance. In fact it is probably not an exaggeration to say that the Egyptian fellah earning 20 cents a day at the present time can bring up a family with less worry and trouble than one of our own workman earning \$2.00 per day.

The most evident feature in any list of prices current during the Empire is the fall in the value of money, a movement that began early in the first century and that never ceased. It becomes noticeable first in the revolutionary period of the third century, when the fifty years of internal strife permanently disorganized the industrial and commercial life of the entire Empire. But great as was the decline in that period, it was nothing in comparison with the fall in the fourth century, when the old money terms lose all meaning, being partially displaced by the new coins of Constantine, and to a greater extent being replaced by barter. This is a phenomenon in no way peculiar to Egypt, but one general to the entire Empire.

In dealing with a people like the Egyptians, whether it be the Egyptians of today or of any older period, we are chiefly concerned with the subsidiary coinage rather than with the gold coinage. The small wages earned by the common laborer made his possession of a gold piece a matter of very rare occurrence. Just as today in Egypt business is transacted in terms of the piaster (a coin equivalent to five cents), so in ancient Egypt business was transacted in terms of the drachma or denarius. This fact becomes more important when we remember that the debasement of the subsidiary coinage was far greater than the debasement of the gold pieces. Thus the solidus of Constantine was worth five-ninths of the aureus of Julius Caesar, but the denarius of Constantine was worth only one four-hundred-and-twentieth part of the denarius of Julius Caesar.

Among the prices in our table which may be assigned to the period before Nero, there is one of great interest: the wage of $3\frac{1}{2}$, 4, and 6 asses paid to weavers in the time of Augustus. With this may be compared the wage of 12 asses paid in Rome to day laborers

in the time of Cicero, some fifty years earlier (see *Pro. Q. Rosc.* x. 28). As both these workmen were among the more poorly paid classes, we may say that the difference between $3\frac{1}{2}$ asses and 12 asses represents the relative difference of the cost of sustaining life in the two countries—a difference made necessary by the greater amount of clothing, of food, of protection against the weather, required in Italy. This difference is further increased by the fact that these Egyptian weavers were probably earning wages slightly higher than those paid ordinary laborers. The $3\frac{1}{2}$, 4, and 6 asses of the papyrus are equivalent to $5\frac{1}{4}$, 6, and 9 obols which may be compared with the 3, 4, and 5 obols paid farm laborers in the year 78/79 A.D., when money was worth roughly 5 per cent less than in the time of Augustus.

For the second period into which our material may be divided—that between Nero and Trajan—we have one extremely important document, i.e., the account book kept on a large estate at Hermopolis in the year 78/79 A.D. From the prices given there we find that a farm laborer would earn from 13 to $21\frac{1}{2}$ drachmae (91 to $150\frac{1}{2}$ obols) per month. This would enable him to buy $1\frac{1}{3}$ to 2 artabae of wheat; from 5 to 9 artabae of vegetables; from $\frac{3}{8}$ to 1 artaba of lentils. If we take prices found in other documents of the same period, we find this laborer would need approximately one year's earnings to purchase a donkey, or the entire earnings of $2\frac{1}{2}$ to 4 years' labor to purchase the eight-year-old slave girl mentioned in the table. With a superabundance of labor forced to work at such wages, it is easy to see why slave owning was not profitable in Egypt. As a matter of fact, the slaves mentioned in the papyri are, almost without exception, women kept as concubines or persons kept as domestic servants. Needless to say, neither class was ever owned by the ordinary fellah.

The prices in the document just mentioned (*P.B.M.*, 131) present an interesting problem. The wages paid farm laborers, 3 to 5 obols per day, are less than those paid weavers in the time of Augustus and also less than those paid farm laborers in the year 105 A.D. Both of these ratios are such as we should expect. In the case of wheat and other produce the ratios with prices at other periods are not what one would expect. For example, the price of wheat is actually higher than in the documents of the years 125, 149, and 183 A.D.,

while vegetables are higher than in the year 191/92 A.D. Both of these differences are greatly increased when we take into account the fall in the value of money by the end of the second century. There seems only one obvious explanation for these facts, and that is a deficiency in the Nile flood of the year 78 A.D. and a corresponding decrease in the amount of arable land and in the quantity of grain that was harvested. Under such conditions wages either remain constant or actually decrease, while prices of food supplies always advance.

In the period of approximately 35 years after the date of the document which has just been discussed (78/79 A.D.) we find wages of farm laborers have approximately doubled. In 105 A.D. wages were from 6 to 9 obols per day in place of the 3 to 5 paid in the earlier period. Eight years later, in 113 A.D., laborers on the canal banks at Hermopolis were paid 40 drachmae per month, or approximately 9 obols per day. Ox drivers were paid less than half this amount, but as far as I know, the reason for this difference is unknown. Despite the rise in wages, the price of wheat, judging from the one document of the period, is actually lower than in 78/79 A.D. This price, however, is in close agreement with prices in the years 149 and 183 A.D., and so is undoubtedly a normal one.

It is an interesting fact that in spite of a further fall in the value of money elsewhere, both wages and prices remained approximately the same until the end of the second century. For this period of seventy-five or eighty years, 8 or 9 obols per day was a fair wage and 8 drachmae (56 obols) per artaba a fair price for wheat. At this wage and price a workman could earn between $4\frac{1}{4}$ and 5 artabae per month, an extremely large sum, as will be shown later.

From documents of the middle of the second century we have much interesting material on the value of farm animals. It is clear that their value was so great that the purchase of one was nearly, if not altogether, impossible for the common laborer. Averaging the value of nine camels sold between 144 A.D. and 160 A.D., we find that they represented an investment of about nine months' labor. Compared with modern prices this is extremely interesting. An ordinary camel today is worth about \$75.00 and represents about seventeen months' labor at the usual wage (3 piasters, or 15 cents

per day). It is often said that the position of the common man was more favorable during the second century of our era than at any other period in Roman history. This seems to be borne out by the evidence of our tables. If we are justified in estimating the laborer's pay at about $4\frac{1}{2}$ artabae per month, we find him earning twice the amount the papyri show he earned in the first century or in the fourth and later centuries. Compared with conditions today, his lot was equally favorable. We have just seen that he could earn a camel in about one-half the time necessary today, while for every bushel of wheat earned today, he could earn a bushel and a half.

For the period between the death of Septimius Severus and the accession of Diocletian, we are singularly devoid of information on which to base inferences of value. At the earlier period the denarius seems to have had a value of about seven cents. In the edict of Diocletian the value of the denarius is stated to be about four-tenths of a cent, but as will be pointed out shortly, there seem to be reasons for believing this value is somewhat inflated. In terms of money, the wages of this period have increased greatly over those of the preceding century, but the increase was far from proportional to the decline in the value of money. In 215 A.D. we find a bricklayer's assistant earning 2 drachmae per day; an amount that is paid to an ordinary laborer in 258/59 A.D. Compared with the wage at 9 obols paid in the preceding century, this wage of 2 drachmae represents an increase of 5 obols per day or of 55 per cent. Wheat likewise advanced. In place of the 8 drachmae per artaba of the Antonine period we find prices of 16, 18, 19, 20 drachmae, representing an advance of 100 to 150 per cent, or two or three times the advance in wages. In other words, wages had been greatly decreased.

It is impossible to compare accurately the wages of labor as given in the edict of Diocletian with those paid in Egypt. Those of Diocletian are naturally much higher, as they seem to be based on conditions found in Eastern Europe and in Asia Minor, rather than along the Nile. If we take the wage paid unskilled labor—25 denarii per day and keep—we have a wage equivalent to $7\frac{1}{2}$ artabae of wheat per month, leaving the "keep" altogether out of the calculation. If we consider the amount of wheat in a contract of the year 605 A.D. in which a man agrees to work for two years at a total

wage of 19 artabae, as the least amount necessary to support life, and add this to the $7\frac{1}{2}$ artabae, we have a wage equivalent to $8\frac{1}{2}$ artabae per month. This is about four times the amount earned by contemporary labor in Egypt. It is interesting to recall that this ratio is in close accord with the ratio of the wages of $3\frac{1}{2}$ and 12 asses earned in Egypt and Italy respectively at the beginning of our era.

When we reach the period beyond Constantine, the old money terms almost cease to have any meaning. During the fourth century we find wheat selling at 26, 30, and 50 talents an artaba; barley at 25 and 30 talents an artaba; aracus at 1,800,000 denarii an artaba; dates at 15 talents an artaba; a pound of meat at 330,000 denarii; chickens at 5 talents apiece; eggs at 2,500 denarii each; two slaves at 2,400 talents; 1,800 pounds of straw at 144 talents; a cowhide at 75,000,000 denarii. Laborers' pay had risen to 200 talents a month. It is when we compare these values with those of the earlier centuries that we realize most forcibly the enormous depreciation of the currency. Thus the rise of wheat from 10 drachmae in 78/79 A.D. to 50 talents in 350 A.D. is equivalent to a fall in the value of the denarius from 1 to $\frac{1}{120000}$. This decline may be shown in another way: in 134 A.D. a cow was sold for 44 drachmae; in 360 A.D. a pound of meat was sold for 145,000 denarii. This means that for the price of a pound of meat at the middle of the fourth century, over 1,300 cattle could have been purchased at the middle of the second century. Other similar examples may be found in the tables; for example, the rise of an artaba of lentils from $2\frac{1}{2}$ to 800 drachmae in the period from 78/79 A.D. to the fourth century. New terms gradually took the place of the denarius and talent. Thus, in the literary sources we find wheat, wine, and other commodities sold at so many measures per solidus. For smaller transactions the follis was used, but these terms are comparatively rare in the papyri, neither of them, apparently, coming into general use in Egypt until shortly before the Arab conquest. In the papyri from the fourth century onward one new term, the myriad of denarii in place of the single denarius, comes into rather general use, but as in all other parts of the Empire the common people were coming more and more to disregard money and were exchanging their produce by

barter. One of our papyri is of particular interest as belonging to what may be called an intermediate stage between exchange by means of money and exchange by means of barter. In this document of the year 360 A.D. 40 artabae of aracus are said to equal in value 72,000,000 denarii or 500 pounds of meat. Here, it is safe to assume, the bargaining was conducted in terms of the produce, and the money value was written in the papyrus merely as a formality.

The uncertainty as to the value of money was responsible in part for the growing custom of paying wages and taxes in kind. For the collection of taxes there were two sets of officials, one for payments in kind, the other for payments in money. In the payment of wages in kind the government perhaps followed the lead of private employers. Two private documents mentioning such payments are quoted in the tables. Other documents combine payments in money and in produce, as does a contract of the year 569 A.D. Here a man binds himself to act as house servant at a yearly wage of 10 artabae of wheat, 4 artabae of barley, 12 xestae of oil, 24 cnidia of wine, and 95 talents of money. The careful enumeration of the articles of food and drink in this document makes it apparent that the money was the least important part of the transaction. In such contracts, entered into, as we may believe, chiefly from a desire to escape the crushing oppression of the tax collector, every advantage was on the side of the rich man. Having once entered into service, the employee lost his freedom of action, and to all intents and purposes he became the serf of the employer. From such contracts the great feudal estates in Egypt and in other parts of the Empire, in large part, took their rise.

If we attempt to draw from our tables any general conclusions as to the relation of wages and the prices of commodities, it is necessary, owing to our ignorance of the value of the coins, to use some standard other than money. Wheat is eminently suited for this purpose, both because there can be no great variation due to differences in quality, and, secondly, because it formed the chief item of food among the common people. If we consider, therefore, the papyri in which both the price of wheat and the wage of labor are mentioned, we are enabled to figure the amount of wheat earned per

month by the common laborer, and so obtain an effective basis for comparison. This information may be tabulated as follows:

78/79 A.D.....2	artabae per month (<i>P.B.M.</i> , 131)
314 A.D.....1½	artabae per month (Pap. Rainer, E, 2000)
Fourth century...2⅓	artabae per month (Pap. Rainer, AN, 295)
Fourth century...2	artabae per month (Pap. Rainer, AN, 289)
Averaging....2	artabae per month

This amount is in exact agreement with *P.B.M.*, 125, where 2 artabae of wheat are given as a month's wage. Although such an amount looks extremely small to us, it was sufficient to maintain the laborer and the non-productive part of his family, namely the children under five or six years of age. Under the Ptolemies an artaba of dura per month was considered a sufficient amount for the proper maintenance of a soldier (see Kenyon, *P.B.M.*, I, 168). This grain was slightly cheaper than wheat, but if we disregard the difference and consider one artaba of wheat per month as a bare living wage, we have a safe basis on which to compare earnings at other periods. Even at a wage of one artaba per month, there was undoubtedly a small surplus available for needs other than food. This is made evident by a contract of the year 605 A.D., already referred to, where a worker in purple agrees to serve two years at a total wage of 19 artabae of wheat—an amount that must have been sufficient to sustain life if nothing else. Even lower than this wage is that provided for in earlier contracts governing apprenticeships. Here we find that 4 or 5 drachmae per day were paid as the equivalent of a boy's food (see Oxyrhyn. Pap. 275 of 66 A.D. and Tebt. Pap. 385 of 117 A.D.). At the contemporary prices of wheat these amount approximately to ½ artaba per month.

If we average all the wages of unskilled labor and all the prices of wheat available for the first two centuries, we obtain an average wage of about 2⅔ artabae per month. Despite the elements of uncertainty which enter into such a calculation, the result is in rather close agreement with that shown in the preceding table. If, however, we take each value of wheat separately and compare it with the nearest available wage we obtain results widely at variance with those given above, but as we are altogether uncertain whether the local conditions which governed the price and the wage are identical or not, the result is not trustworthy.

Today in Egypt one gains the impression that the common people are working for the mere right to exist, their wages permitting nothing but the bare necessities of life. That conditions in Egypt under the Romans and probably in every other period were not different for the bulk of the population is clearly shown by the comparison of wages and prices that has just been made.

No attempt has been made here to estimate the earnings of skilled labor. So many things enter into the question of such wage, as for example, the degree of skill in a weaver or an acrobat, the reputation of a race-track manager, that it seems impossible to deduce any conclusions of value from our evidence.

In a general way, the articles in our list of prices may be divided into two classes: luxuries and necessities. We have just seen that the peasant could buy nothing but the necessities. In all probability, to judge from modern conditions, his buying power was limited to grain, a few vegetables, herbs for sauces and relishes, a little clothing, a covering under which to lie at night, and two or three coarse household pots. All other objects were for the richer classes.

In Table I an effort has been made to show the modern equivalents of certain coins at different dates in the period under consideration. It would be idle to claim that the figures represent anything but a rough approximation of the truth. There seems no more bewildering problem in the whole field of papyrus studies than the valuation of the money in use in Roman Egypt.

Diocletian in his edict tells us the number of denarii, 50,000, in a pound of gold, thus furnishing an exact valuation. In certain other reigns we are told the weight of the aureus or solidus, but even then we cannot be sure that the coin mentioned in the papyrus contains the legal weight of gold. Thus in *P.B.M.*, 483 of 616 A.D. the solidus there used was said to be one-twelfth below the proper weight. At one time three gold standards seem to have been in use in Egypt. In Oxyrhyn. Pap. 154 of the seventh century a sale of 482 $\frac{2}{3}$ artabae, 1 choenix of wheat was made for 48 $\frac{9}{32}$ solidi less 193 ceratia on the private standard, or for 36 $\frac{7}{32}$ solidi on the public standard, or for 36 $\frac{1}{32}$ solidi on the Alexandrine standard. One of the edicts of Justinian is directed against the Egyptian custom of making a distinction between pure and impure gold, but the document just quoted as well as others (i.e., *O.P.*, 126 of 572 A.D.) show it had little effect.

Even if we knew the weight of the gold coin we could not be sure of its relation to the subsidiary coinage, for the extent to which the smaller coins were debased makes it impossible to place any reliance on their legal or theoretical values. A comparison of the value of the denarius as given by Diocletian with its value in the next few years makes it possible that Diocletian's evaluation is not altogether trustworthy. A few years after the abdication of Diocletian, Constantine reformed the currency, making the solidus $\frac{1}{72}$ of a pound and the denarius $\frac{1}{8000}$ of the solidus or $\frac{1}{432000}$ of a pound of gold. This is less than one-eighth the value of the denarius as given in the edict of Diocletian. Such a drop in the course of ten or eleven years is almost unthinkable. The effect of such a depreciation in Egypt where business was conducted largely in terms of the subsidiary coinage may be surmised from the relative depreciation of the gold and other coinage. Thus, the solidus of Constantine was worth about 16 per cent less than the corresponding gold coin of Diocletian, but the denarius of Constantine shows a decrease of 1200 per cent from the denarius of Diocletian as given in the edict. Great as are these decreases in the value of the coinage, the advances made in the price of commodities are even greater. According to Diocletian, wheat was to sell no higher than 100 denarii a modius; in 314 A.D. it was sold for 10,000 drachmae an artaba, an increase of 57 times. In the same way barley in 314 A.D. shows an increase of 95 times the price in 301 A.D. Wine sold in 301 A.D. for 8 denarii a sextarius; in 314 A.D. for 1,800 drachmae a cnidium or 360 drachmae a sextarius, an increase of 45 times. Lentils increased about 8 times, a Babylonian hide, 2,400 times, shoes 20 times. Differences such as these are difficult to explain if we regard the denarius in 301 A.D. as actually worth what Diocletian said it should be worth. All our facts, however, tempt us to believe that Diocletian in his efforts to systematize the value of money was endeavoring to give a totally fictitious value to the denarius. This hypothesis has been put forward by Bücher in a publication so far inaccessible to me. It is supported by the familiar quotation from Lactantius who says in reference to the edict: "then much blood was shed for the veriest trifles; men were afraid to offer anything for sale, and the scarcity became more excessive and grievous than ever." The only condition under which men ordinarily refuse to sell is when they are unable to obtain a fair

return for their produce. In 301 A.D., therefore, producers must have felt that in selling wheat at 100 denarii they were obtaining in return far less than they should.

On the other hand, it seems natural to assume that Constantine, in reforming the currency, gave the denarius a legal value approximating its true value at the time. From later edicts of the years 396 A.D. and 445 A.D. we learn that the government at those periods was unable to enforce a fictitious value of the denarius and in each year promulgated a new legal value in close agreement with the actual value of the coin.

That the subsidiary coinage which was, in reality, nothing but a fiat coinage, varied in value from day to day is self-evident from modern analogies. It is also supported by an interesting statement in a private letter of the late fourth century: "the solidus now stands at 2,020 myriads (of denarii); it has gone down" (see *O.P.*, 1223).

In conclusion, it should be stated that all references to the papyri of the Rainer Collection have been taken from various publications by Wessely. All other references have been verified.

TABLE I
ROUGHLY APPROXIMATE VALUES OF THE COINS MENTIONED IN THE TEXT

Date	Coin	Value	Remarks
J. Caesar	aureus	\$5.4335	
	denarius	0.2173	
Augustus	aureus	5.1765	
	denarius	0.2071	
Nero	aureus	4.9170	
	denarius	0.1975	
Trajan	denarius	0.1214	
S. Severus	denarius	0.0714	
M. Aurelius	denarius	0.0976	
Caracalla	aureus	4.348	
Gordian	denarius	0.0717	
Diocletian	aureus	3.6224	
	foliis	0.0087	
	denarius	0.00435	
Constantine 312 A.D.	solidus	3.018	
	siliqua (orceratium)	0.12575	
	talent	0.02515	
	foliis	0.01214	of 323 A.D.
	nummus	0.01049	
	denarius	0.000503	
Middle fourth century	talent	0.00988	
End fourth century	foliis	0.01238	
	myriad of denarii	0.001494	cf. O.P. 1223
	denarius	0.000443	
445 A.D.	foliis	0.013566	
	denarius	0.000419	
Sixth century	foliis	0.01428	early Justinian
	"	0.014994	in 538 A.D.
	"	0.01666	in 558 A.D.
	denarius	0.000345	early in century
Sixth to seventh century	myriad of denarii	0.000483	

TABLE II
A. WAGES OF WORKMEN

Date	Employment	Term	Wage	Authority
1 A.D.	weaver	per day	3½ asses	O.P. 737
" "	hired man ¹	" "	4 asses	O.P. 737
" "	foremen of weavers	" "	6 asses	O.P. 737
8/9 A.D.	performer or artiste ²	" "	1 dr., 4½ ob.	O.P. 731
78/79 A.D.	farm laborers ³	" "	3-5 ob.	P.B.M. 131
" "	donkey boys	" "	2½ ob.	P.B.M. 131
92 A.D.	guard	per month	40 dr.	P.B.M. 701
First century	guard	per day	1 dr., 5 ob.	O.P. 390
" "	laborers	" "	4 ob.	O.P. 985
105 A.D.	laborers, men ⁴	" "	6 ob.	Fayum Towns 102
" "	" , young men	" "	5 ob.	Fayum Towns 102
" "	laborers, boys	" "	1-4 ob.	Fayum Towns 102
" "	men for γόμοι and δπάματα	" "	7-8 ob.	Fayum Towns 102
113 A.D.	contractor in charge of water works	per month	40 dr.	P.B.M. 1177
" "	laborers on water works ⁵	" "	40 dr.	P.B.M. 1177
" "	contractor for ox drivers	" "	32 dr.	P.B.M. 1177
" "	ox drivers	" "	16 dr.	P.B.M. 1177
125 A.D.	laborers	per day	9 ob.	Fayum Towns 331
143 A.D.	"	" "	8 ob.	B.G.U. 99
154 A.D.	"	" "	8 ob.	B.G.U. 391
160 A.D.	"	" "	8 ob.	P.B.M. 296
162 A.D.	"	" "	8 ob.	B.G.U. 704
165 A.D.	contractor with three camel drivers and four boys to carry grain	" "	40 dr.	P.B.M. 331
168 A.D.	laborers	" "	8 ob.	P.B.M. 337
172 A.D.	bricklayer ⁶	per 10,000 bricks	40 dr.	Tebt. Pap. 402
178/9 A.D.	laborers	per day	8 ob.	B.G.U. 359
183 A.D.	wages of weaver's apprentice. ⁷ Nothing for 2 yrs. 7 mos., then rest of third year	per month	12 dr.	O.P. 725
	fourth " fifth "	" "	16 dr.	
		" "	24 dr.	

¹ This is the rather unsatisfactory translation of the *conductei* of the papyrus.

² This performer contracted to serve 30 days at 1 dr., 2 ob. per day, plus a bakshish, or tip, of 13 dr., 2 ob., on the completion of his contract.

³ In a Pompeian inscription (*C.I.L.*, 4, 4,000), the sum of 5 asses is allowed for *diaria*.

⁴ Frontinus *De Aq.* 116 gives the sum of 250,000 sesterces as that paid to a familia of 240 slaves engaged on the aqueducts. The sum includes both the maintenance of the slaves and the cost of the supplies needed in their work. We may perhaps estimate the wage alone as 2 or 3 sesterces per man per day.

⁵ Why the laborer should in this instance be paid as much as his foreman is not clear to me.

⁶ In Tebt. Pap. 402 of 172 A.D. the laying of 2,200 bricks is shown to be a fair day's work. At the rate of 40 drachmae for 10,000 this amounts to a wage of 8½ drachmae per day. It is unfortunate that the number of men necessary to lay 2,200 bricks is unknown.

⁷ In addition to these payments, the teacher was to give the boy a tunic each year costing 16, 20, 24, 28, 32 drachmae respectively.

TABLE II—Continued

Date	Employment	Term	Wage	Authority
187 A.D.	nurse	for 2 years	400 dr.	O.P. 91
190/1 A.D.	sitologos	per year	400 dr.	O.P. 514
Second century	stevedores ¹	per day	1 dr., 3 ob.	O.P. 522
" "	" "	" "	4 ob.	O.P. 522
" "	stone cutter with keep	" "	4 dr.	O.P. 498
" "	donkey driver	" "	1 dr., 5 ob.	O.P. 1049
" "	" "	" "	2 dr., 4 ob.	O.P. 1049
" "	workman tying bundles	" "	1 dr., 5 ob.	O.P. 1049
215 A.D.	bricklayer	" "	2½ dr.	B.G.U. 362
" "	" , as-sistant	" "	2 dr.	B.G.U. 362
255 A.D.	laborers	" "	6-9 dr.	B.G.U. 14
258/59 A.D.	manual laborer	" "	2 dr.	P.B.M. 1170
301 A.D.	with keep	" "	25 denar.	Edict. Dioclet. 7.1
" "	bricklayer	" "	50 denar.	Edict. Dioclet. 7.2
" "	stone mason	" "	50 denar.	Edict. Dioclet. 7.7
314 A.D.	laborers	" "	400 dr.	Pap. Rainer
" "	" "	" "	500 dr.	E 2000
" "	" "	" "	650 dr.	Pap. Rainer
340 A.D.	" "	per month	12 tal.	E 2000
" "	" "	" "	15 tal.	B.G.U. 21
" "	" "	" "	25 tal.	B.G.U. 21
Fourth century	cobblers	per month (?)	60 tal.	Pap. Rainer
" "	oil workers	" " (?)	130 tal.	NN 94
" "	tarsicarius	per day	8 tal.	Pap. Rainer 37
" "	weaver	per month	136 tal.	Pap. Rainer
" "	groom	" "	3,500 dr.	AN 289
" "	mulio	" "	6,000 dr.	Pap. Rainer
" "	shipmaster	per day	100 tal.	AN 299
" "	laborer	per month	200 tal.	Pap. Rainer E 1014
" "	" , assistant	" "	60 tal.	Pap. Rainer
" "	" "	" "	60 tal.	AN 289
" "	" "	" "	2 art. of wheat	Pap. Rainer
" "	lanarius	" "	2 art. of wheat	AN 295
" "	mechanic	" "	4 art. of wheat	P.B.M. 125
" "	cook	" "	25 art. of wheat	P.B.M. 125
Anastasius	laborer without donkey	per day	4 ceratia	P.B.M. 125
" "	laborer with donkey ²	" "	8 ceratia	Zach. of Mitylene 7.6
590 A.D.	laborer	" "	4/9 cnidium of wine	Zach. of Mitylene 7.6
605 A.D.	purple worker	for 2 years	19 art. of wheat	O.P. 207
610/11 A.D.	man in charge of race track and stable	per year	72 solidi	Erman u. Krebs, Aus d. Pap. d. kön. mus., p. 219
618 A.D.	starter in the hippodrome	per month	5½ ceratia	O.P. 152

¹ This is perhaps the foreman of the stevedores.² These were wages paid in the construction of Dara in Mesopotamia and are said to be extremely high.

TABLE II—Continued

B. FOOD AND DRINK

Article	Date	Measure	Price	Authority
Wine	8 B.C.	300 cotylae	18 dr.	P.B.M. 1171
"	1 A.D.	1 jar	6 dr.	O.P. 745
"	78/9 A.D.	1 "	10 dr.	P.B.M. 131
"	130 A.D. ¹	1 "	7½ dr.	O.P. 472
"	191/2 A.D. ²	1 "	15 dr.	Goodspeed, Gk. Pap. 30. 19. 2
"	" "	1 "	16 dr.	Goodspeed, Gk. Pap. 30. 3. 10
"	" "	1 cnidium ³	24 dr.	Goodspeed, Gk. Pap. 30. 35. 21
"	second century	1 jar	8 dr., 1 ob.	O.P. 522
"	" "	1 "	8 dr., 4 ob.	Wilcken, G.O., I, 356
"	" "	1 "	3 denar.	Giessen Pap. 79
"	254 A.D.	1 monochorum	8 dr.	P.B.M. 1226
"	267 A.D.	101 jars	1,100 dr.	O.P. 1055
"	third century	1 chus	16 dr.	Grenfell, Gk. Pap. II, 77
"	" "	1 "	20 dr.	Grenfell, Gk. Pap. II, 77
"	301 A.D.	1 sextarius	8 denar.	Edict. Dioclet. 2. 10
"	314 A.D.	1 cnidium	1,800 dr.	Pap. Rainer E 2000
"	340 A.D.	1 "	34 tal.	B.G.U. 21
"	" "	1 xestes	3 tal.	B.G.U. 21
"	350 A.D.	1 cnidium	2 tal.	P.B.M. 429
"	" "	1 spathium	25 tal.	P.B.M. 249
"	fourth century	1 jar	2 tal., 2,000 dr.	O.P. 1288
"	" "	1 spathium	7 tal.	O.P. 1298
"	" "	1 xestes	330,000 denar.	P.B.M. 984
"	" "	1 "	4 tal., 2,000 dr.	Pap. Rainer AN 289
"	" "	1 cnidium	1 tal.	Pap. Rainer AN 295
"	" "	1 "	3 tal., 2,000 dr.	Pap. Rainer AN 295
"	" "	1 "	20 tal.	Pap. Rainer AN 295
"	" "	1 spathium	5 tal.	Pap. Rainer AN 295
"	" "	1 "	20 tal.	Pap. Rainer AN 295
"	" "	1 xestes ⁴	2 tal.	Pap. Rainer 37
Vinegar	255 A.D. ⁵	1 jar	12 dr.	B.G.U. 14
"	340 A.D.	1 xestes	1,060 dr.	B.G.U. 21
Beer	Tiberius	1 chus	2 ob.	Tebt. Pap. 401
"	78/79 A.D.	1 measure	1½ ob.	P.B.M. 131
"	301 A.D.	1 sextarius	2 denar.	Edict. Dioclet. 2. 12

¹ In this document 150 jars of wine are pledged for the interest on 1½ talents of money. At the usual rate of 12 per cent, this means each jar was pledged for 7½ dr., which is probably a little less than the real value.

² This price is only approximate. In the papyrus 38 jars are sold for 542 dr., 1 chalcus. Goodspeed, *op. cit.*, p. 33 translates the "λη" of the papyrus as "four dozen" thus obtaining a price of 11½ dr. per jar.

³ Goodspeed, *op. cit.*, p. 63 favors considering the κνιδιο of the papyrus as a diminutive of κνιδη (nettle) rather than from κνιδιον as here in the table.

⁴ In Mesopotamia in ordinary times 25 measures of wine could be purchased for one aureus; in times of famine, the price rose until 2 measures only could be purchased for the same amount (see Joshua the Stylite, *Chron.* 43, 87 for the years 501/2 and 503/4 A.D.). In the reign of Theodoric wine could be purchased in Italy at the rate of 30 amphorae for one solidus (see Frag. Anon. Vales. 73).

⁵ In Dacia in the year 166 A.D. vinegar was sold at the rate of ½ denarius for 1 sextarius; see *C.I.L.*, 3, p. 953.

TABLE II—Continued

Article	Date	Measure	Price	Authority
Raphanus oil	255 A.D.	1 cotyla	2 dr.	B.G.U. 14
Oil	18 B.C.	1 choenix	5 dr.	Fayum Towns 101
"	1 A.D.	1 chus	4 dr. 2 ob.	O.P. 739
"	"	1 "	4 dr. 3 ob.	O.P. 739
"	"	1 "	4 dr. 4 ob.	O.P. 736
"	"	1 "	5 dr.	O.P. 819
"	191/2 A.D. ¹	1 "	16 dr.	Goodspeed, Gk. Pap. 30. 24. 16
"	255 A.D.	1 cotyla	4 dr.	B.G.U. 14
" (first quality)	301 A.D.	1 sector.	40 denar.	Edict. Dioclet. 3. 1
" (second quality)	" "	1 "	24 denar.	Edict. Dioclet. 3. 2
" (coarse quality)	" "	1 "	12 denar.	Edict. Dioclet. 3. 3
"	third century	1 chus	6 dr.	Grenfell, Gk. Pap. II. 77
Wheat	69/79 A.D. ²	1 artaba	20 dr.	P.B.M. 896
"	78/79 A.D.	1 "	11 dr.	P.B.M. 131
"	"	1 "	10 dr.	P.B.M. 131
"	125 A.D.	1 "	7 dr. 1 ob.	B.G.U. 834
"	149 A.D.	1 "	7 dr.	Tebt. Pap. 394
"	183 A.D.	1 "	8 dr.	B.G.U. 200
"	191/92 A.D.	1 "	18 dr.	Goodspeed, Gk. Pap. 30. 13. 11
"	" "	1 "	20 dr.	Goodspeed, Gk. Pap. 30. 15. 24
"	255 A.D.	1 "	16 dr.	B.G.U. 14
"	250-300 A.D.	1 "	19 dr.	Grenfell, Gk. Pap. I. 51
"	301 A.D. ³	1 cast. modius	100 denar.	Edict. Dioclet. 1. 1
"	314 A.D.	1 artaba	1 tal. 4,000 dr.	Pap. Rainer E 2000
"	350 A.D.	1 "	50 tal.	P.B.M. 427
"	fourth century	1 "	30 tal.	Pap. Rainer AN 289
"	" "	1 "	26 tal.	Pap. Rainer AN 295
"	" "	13 "	1 aureus	Palladius, Ascetikon 11
"	" "	5½ ⁴ "	1 aureus	Palladius, Ascetikon 11
"	seventh century ⁵	1 "	2 ceratla	O.P. 154
Barley	191/92 A.D. ⁶	1 "	10 dr., 1 ob.	Goodspeed, Gk. Pap. 30. 33. 31
"	301 A.D. ⁷	1 cast. modius	100 denar.	Edict. Dioclet. 1. 2

¹ The measure here is not expressed in the papyrus.² As it is doubtful whether this price refers to wheat or some other commodity, this item has been disregarded in all calculations.³ This is equivalent to 74½ cents per bushel. In 1912 the average price was \$1.06 per bushel.⁴ This is a famine price, the preceding price being the usual one.⁵ Joshua the Stylite (*Chron.* 26) gives the usual price of wheat in Mesopotamia as 30 modii for one aureus. During the Persian Wars at the end of the fifth century the price rose until it reached the rate of 13 choenices for one aureus. At Antioch in the middle of the fourth century the ordinary price was 10 modii for one aureus; see Julian, *Opera*, p. 369 B.⁶ This price is only approximate. In the papyrus 3 artabae are sold for 30 dr., 2 ob., 1 chalcus.⁷ This price is equivalent to 74½ cents per bushel. In 1912 the average price of barley was \$1.01 per bushel.

TABLE II—Continued

Article	Date	Measure	Price	Authority
Barley	314 A.D.	1 artaba	1 tal., 4,000 dr.	Pap. Rainer E 2000
"	346 A.D.	1 "	30 tal.	P.B.M. 248
"	third to fourth century ¹	1 "	14 dr.	Fayum Towns 131
"	third to fourth century ¹	1 "	20 dr.	Grenfell, Gk. Pap. II, 77
"	fourth century	1 "	25 tal.	Pap. Rainer AN 289
"	sixth "	12½ "	1 solidus	Vitelli, Pap. d. Soc. Ital. 88
'Pure' bread	1 A.D. ³	each	½ ob.	O.P. 736
Cake	" "	"	½ ob.	O.P. 736
Aracus	360 A.D. ⁴	1 artaba	1,800,000 denar.	O.P. 1056
"	fifth century	1 "	1,700 tal.	Giessen Pap. 105
"	"	1 "	1,800 tal.	Giessen Pap. 105
Cummin	18 B.C.	1 "	7 dr.	Fayum Towns 101
"	fourth or fifth century ⁵	1 xestes	1 tal. 4,000 dr.	Pap. Rainer NN 74
Cnecus	18 B.C.	1 artaba	4 dr.	Fayum Towns 101
Lotus	95/96 A.D.	1 "	18 dr.	Fayum Towns 111
Dates	346 A.D.	1 "	15 tal.	P.B.M. 248
Date palms	348 A.D.	2 trees	124 tal.	B.G.U. 458
Vegetables	78/79 A.D.	1 artaba	20-21 dr.	P.B.M. 131
"	191/92 A.D.	1 "	16 dr.	Goodspeed, Gk. Pap. 30. 24. 17
Vetches	" "	1 "	18 dr.	Goodspeed, Gk. Pap. 30. 16. 21
Lentils	78/79 A.D.	1 "	2½ dr.	P.B.M. 131
"	301 A.D.	1 "	100 denar.	Edict. Dioclet. I. 11
"	fourth century	1 "	800 dr.	Pap. Rainer E 206
Onions	" "	1 xestes	500 tal.	Pap. Rainer E 1014
Cabbage	1 A.D.	each	½ ob.	O.P. 736
Coriander	" "	1 artaba	6 dr., 3 ob.	O.P. 819
Pease	255 A.D.	1 "	16 dr.	B.G.U. 14
Fruit of jujube tree	second to third century	1 "	20 dr., 2 ob.	O.P. 920
Meat	360 A.D. ⁶	1 lb.	145,000 denar.	O.P. 1056
"	fourth century	1 "	330,000 denar.	P.B.M. 984
"	"	1 "	1 tal., 2,000 dr.	Pap. Rainer AN 295
"	" "	1 "	4 tal., 2,000 dr.	Pap. Rainer AN 289
"	" "	1 "	3,200 dr.	P.B.M. 1289
Liver	" "	1 "	3,200 dr.	P.B.M. 1259
Pigeons	1 A.D. ⁷	each	1 ob.	O.P. 736

¹ These prices are in close accord with those of the second century and make it possible that the documents belong to that period.

² In Mesopotamia at the very beginning of this century the usual price of barley was 50 modii for one aureus; see Joshua the Stylite, *Chron.* 26. The 12½ artabae of the papyrus equal 43½ modii, so the agreement between the two prices is fairly close.

³ In the English translation of Cassian (*Instil.*, 4, 14) the price of bread is given as "three pence" for 2 loaves. The original has been inaccessible to me. In Oxyrhyn. Pap. 522 one loaf with relish is the amount given per day to a workman for his "keep."

⁴ In this instance 40 artabae of aracus valued at 72,000,000 denarii were given in exchange for 500 pounds of meat. This seems a case of barter.

⁵ In Diocletian's edict (i. 32) the price is given as 200 denarii for one castrensis modius.

⁶ In Diocletian's edict (iv. 2) beef is worth 8 denarii a pound; an enormous difference from the prices given in our table.

⁷ In Diocletian's edict (iv. 29) pigeons are worth 24 denarii a pair.

TABLE II—Continued

Article	Date	Measure	Price	Authority
Birds	fourth century ¹	each	5 tal.	Pap. Rainer AN 295
"	" "	"	1 tal., 2,000 dr.	P.B.M. 1259
"	fourth to fifth century	"	4 tal., 2,000 dr.	Pap. Rainer NN 74
Eggs	fourth to fifth century ²	"	2,500 dr.	Pap. Rainer NN 74
Fish	fourth to fifth century ³	"	60,000 dr.	Pap. Rainer NN 74
Garum	143 A.D. ⁴	double jar	2 dr.	O.P. 520
"	fourth to fifth century ⁵	jar	150,000 dr.	Pap. Rainer NN 74
Breakfast	1 A.D.		1 ob.	O.P. 736
Grinding wheat	" "	per artaba	3 to 4 ob.	O.P. 736

C. WEARING APPAREL

Article	Date	Number	Price	Authority
Linen cloths	21 A.D.	each	3 dr.	O.P. 1281
" "	266 A.D.	"	8 dr.	Tebt. Pap. 406
" "	third to fourth century	"	20 dr.	Grenfell, Gk. Pap. II, 77
Chiton, linen	first century ⁶	"	4,600 dr.	Vitelli, Pap. d. Soc. Ital. 64
"	50 A.D.	"	8 dr.	O.P. 285
"	183 A.D.	"	16 dr.	O.P. 725
"	"	"	20 dr.	O.P. 725
"	"	"	24 dr.	O.P. 725
"	"	"	28 dr.	O.P. 725
"	"	"	32 dr.	O.P. 725
"	second century ⁷	"	8 dr.	O.P. 1269
" , white-tasseled and striped	260 A.D.	"	100 dr.	O.P. 1273
Paenula	third century	"	40 dr.	Tebt. Pap. 423
Robe, milk white	1 A.D.	"	10 dr.	O.P. 736
Chlamys and sticharium	36 A.D.	"	12 dr.	O.P. 267
Sticharium	fourth century	"	17 tal.	O.P. 1288
	346 A.D.	"	154 myriads of denar.	P.B.M. 247
Delmatica, silvery- striped	260 A.D.	"	260 dr.	O.P. 1273
Delmatica, turquoise color	" "	"	100 dr.	O.P. 1273

¹ In Diocletian's edict (iv. 23) fowls are worth 60 denarii a pair.² During the Persian invasion of Mesopotamia in the year 500/501 A.D., eggs were sold at 40 nummi apiece, a famine price; see Joshua the Stylite, *Chron.* 43.³ In Diocletian's edict (v. 3, 4) river fish are worth 12 and 8 denarii a pound.⁴ Garum or fish pickle was made in the Fayum, and this is undoubtedly the native product.⁵ In Diocletian's edict (iii. 6, 7) the price is given as 16 and 12 denarii per sextarius.⁶ A comparison of this price with others from the first century makes it evident that there is a mistake here either in the date of the document or in the price. Two or three slaves at the contemporary prices could be bought for this amount.⁷ The price here given is that at which the garment was pawned and is, accordingly, something less than the real value. In another second-century papyrus (*P.B.M.*, 193) various garments are pawned at the following prices: white chiton, 11 dr.; green chiton, 16 dr.; scarlet chiton, 20 dr.

TABLE II—Continued

Article	Date	Number	Price	Authority
Delmatica, white, purple border	260 A.D.	each	100 dr.	O.P. 1273
Delmatica	fourth century	"	2 tal. plus 1 cndium of wine	Pap. Rainer AN 299
Vest, Dalmatian, onyx color	fifth century	"	33,850,000 denar.	O.P. 1026
Vest, Xolte	" "	"	30,000,000 denar.	O.P. 1026
Kerchief	" "	"	7,500,000 denar.	O.P. 1026
Towel and linen cloth	" "	"	15,000,000 denar.	O.P. 1026
Himatum	first century ¹	"	5 copper tal.	Vitelli, Pap.d. Soc. Ital. 64
Babylonian hide	301 A.D.	"	500 denar.	Edict. Dioclet. 8, 1
" "	346 A.D.	"	1,200,000 denar.	P.B.M. 247
Shoes, women's	fourth century	"	1,200 dr.	O.P. 1288
"	301 A.D.	"	60 denar.	Edict. Dioclet. 9, 10
" with hobnails	fourth century	"	3 tal., 2,000 dr.	Pap. Rainer AN 289
Weaving loom, 3 cubits less 2 palms in width	54 A.D.	"	20 dr.	O.P. 264
Needle and thread	1 A.D.	"	1 ob.	O.P. 736
" , sewing, first quality	301 A.D.	"	5 denar.	Edict. Dioclet. 16, 8a
Needle, sewing, second quality	"	"	2½ denar.	Edict. Dioclet. 16, 9
Weaving a paenula	1 A.D.	"	1 dr., 2 ob.	O.P. 736

D. HOUSEHOLD UTENSILS

Article	Date	Number	Price	Authority
Tin lecythus	second century ²	each	4 dr.	O.P. 1269
Ladles	fifth century	for 4	470 myriads of denar.	O.P. 1289
Curved knives	" "	for 3	120 myriads of denar.	O.P. 1289
Scissors	" "	for 5	250 myriads of denar.	O.P. 1289
" , large	" "	for 2	150 myriads of denar.	O.P. 1289
Knife	" "	each	30 myriads of denar.	O.P. 1289
Cups	" "	for 24	1,200 myriads of denar.	O.P. 1289
" , large	" "	for 13	1,054 myriads of denar.	O.P. 1289
Triclinium with linen cover and four cushions, embroidered	255 A.D.		500 dr.	O.P. 1277
Basket	1 A.D.	each	1½ ob.	O.P. 739
" , for fish	143 A.D.	for 8	1 dr., 1 ob.	O.P. 520
" , small	191/92 A.D.	each	4 dr.	Goodspeed, Gk. Pap. 30, 22, 13
" , large	314 A.D.	"	300 dr.	Pap. Rainer E 2000
" , small	314 A.D.	"	200 dr.	Pap. Rainer E 2000
Wicks	143 A.D.	for 50	1 ob.	O.P. 520

¹ One copper talent here is worth 36 silver drachmae.² The price here given is that at which the article was pawned; the real value would be somewhat higher.

TABLE II—*Continued*
E. OBJECTS OF PERSONAL ADORNMENT

Object	Date	Price	Authority
Pair of gold earrings	36 A.D.	20 dr.	O.P. 267
Pair of unstamped silver bracelets	114 A.D. ¹	40 dr.	B.G.U. 22

F. ANIMALS

Animal	Date	Price	Authority
Cow, with calf	124 A.D.	62 dr.	P.B.M. 839
"	134 A.D.	44 dr.	Fayum Towns 62
"	337-350 A.D.	600 tal.	P.B.M. II, 304
Donkey ²	101 A.D.	306 dr.	Vitelli, Pap. d. Soc. Ital. 38
"	111 A.D.	208 dr.	Tebt. Pap. 474
" , young female	126 A.D.	56 dr.	Fayum Towns 93
"	142 A.D.	148 dr.	P.B.M. 303
"	143 A.D.	160 dr.	P.B.M. 466
"	148 A.D.	64 dr.	P.B.M. 313
" , female with foal	179 A.D.	160 dr.	P.B.M. 339
"	197 A.D.	300 dr.	B.G.U. 527
"	second to third century	260 dr.	B.G.U. 228
"	216/17 A.D.	1,500 dr.	Vitelli, Pap. d. Soc. Ital. 79
"	219 A.D.	500 dr.	B.G.U. 413
"	fourth century	20 tal.	Pap. Rainer AN 289
"	sixth to seventh century ³	2½ solidi	O.P. 922
Camel	144 A.D.	500 dr.	B.G.U. 87
"	147 A.D.	800 dr.	B.G.U. 88
"	150 A.D.	670 dr.	B.G.U. 416
"	152 A.D.	800 dr.	B.G.U. 153
"	154 A.D.	580 dr.	B.G.U. 453
"	157/8 A.D.	800 dr.	P.B.M. 320
"	159 A.D.	780 dr.	B.G.U. 100
"	159/60 A.D.	680 dr.	B.G.U. 469
"	160 A.D.	600 dr.	P.B.M. 323
" and 2 foals	177-79 A.D.	900+dr.	P.B.M. 1100
" , male Arabian	289 A.D.	16 tal., 3,000 dr.	B.G.U. 13
" , female	302 A.D.	9 tal.	Grenfell, Gr. Pap. II, 74
" , "	302 A.D.	9 tal.	P.B.M. 714
" , male	"	9 tal.	Grenfell, Gr. Pap. II, 74
Pig, young	191/2 A.D.	20 dr.	Goodspeed, Gk. Pap. 30. 23. 8
"	second century ⁴	40 dr.	O.P. 1269
" , young	"	2 dr. 3 ob.	P.B.M. 928
"	fourth century	50 denar.	Wessely, Ein Alter-sindiz., p. 8

¹ The bracelets were valued, as in modern Egyptian usage, according to the weight of the coin silver they contained.

² At Pompeii the price of a mule is given at 520 sesterces; see *C.I.L.*, 4, 3340, 1. Apuleius records the sale of a donkey at three different prices: 17 denarii, 50 sesterces, 11 denarii; see *Metam.* 8. 25; 9. 31; 10. 13.

³ The price here mentioned is the average at which ten animals in the papyrus were sold.

⁴ In the Dacian wax tablets (*C.I.L.*, 3, p. 953, of the year 166 A.D.) the price of a young pig is given as 5 denarii.

TABLE II—*Continued*

Animal	Date	Price	Authority
Pig	fourth century ¹	8 tal.	P.B.M. 1259
" , young	fifth century	3 ceratia	Pap. Rainer E 420
	seventh century	3 ceratia less 36 folles	Pap. Rainer AN 432
Horse	148 A.D. ²	188 dr.	Vitelli, Pap. d. Soc. Ital. 39
"	sixth to seventh century	2 solidi	O.P. 922
" , from Constanti-	sixth to seventh century	3 solidi	O.P. 922
nople	618 A.D.	3 solidi	O.P. 153
Horse	second to third century	18 dr., 2 ob.	O.P. 184
Sheep			

G. SLAVES

Kind of Slave	Date	Price	Authority
Girl, 8 years old	77 A.D.	640 dr.	O.P. 263
Woman, with two(?) children	79 A.D.	1,800 dr.(?)	O.P. 375
Slave child	85/86 A.D.	140 dr.	O.P. 336
Woman, 35 years old	86 A.D.	10 dr. of silver plus 10 tal., 3,000 dr. of copper	O.P. 48
Man	100 A.D.	10 dr. of silver plus 2 tal., 600 dr. of copper	O.P. 49
Woman, 25 years old	129 A.D. ³	1,200 dr.	O.P. 95
Boy	166 A.D. ⁴	200 denar.	P.B.M. 229
Woman, 25 years old	178 A.D.	900 dr.	O.P. 485
Man	180 A.D. ⁵	520 dr.	O.P. 96
Girl, with infant boy	251-53 A.D.	2,000 dr.	O.P. 1209
Woman, with 2 children	291 A.D.	14 tal.	O.P. 1205
Slaves, two	337-350 A.D.	2,400 tal. for two	P.B.M. 251
Gallie boy	359 A.D. ⁶	18 solidi	B.G.U. 316

H. BUILDING MATERIAL

Article	Date	Price	Authority
Outer squared stones	second century	16 for 4 dr.	O.P. 498
Inner " "	" "	30 for 4 dr.	O.P. 498
Antilemata " "	" "	100 for 3 dr.	O.P. 498

¹ The prices given in this papyrus are confusing; i.e., pig or pork, 2,400 drachmae; pig, 8 talents; young pig, 10 talents.

² The price of this horse is so low when compared with the prices of contemporary donkeys and camels that we must infer it was a very poor specimen.

³ In the Dacian wax tablets the sales of three slaves are recorded:

139 A.D.	six-year old girl	205 denar.	<i>C.I.L.</i> , 3, p. 937
142 A.D.	boy	600 denar.	<i>C.I.L.</i> , 3, p. 941
160 A.D.	girl	420 denar.	<i>C.I.L.</i> , 3, p. 959

⁴ This sale took place in Italy, the purchaser being an Egyptian attached to the fleet at Misenum.

⁵ This price is obtained by considering the tax of 52 drachmae paid on the sale as equal to 10 per cent of the value of the slave.

⁶ This sale was made in Ascalon to a soldier from Arsinoe who was temporarily in Syria.

TABLE II—Continued

Article	Date	Price	Authority
Outer oblong corner stone	second century	16 for 8 dr.	O.P. 498
Inner oblong corner stone	" "	30 for 8 dr.	O.P. 498
Chipped, squared stone	" "	50 for 4 dr.	O.P. 498
Chipped, oblong corner stone	" "	50 for 8 dr.	O.P. 498
Brick, laying 10,000	172 A.D.	40 dr.	Tebt. Pap. 402

I. TRANSPORTATION

Date	Nature of Transportation	Price	Authority
Second century	Donkey hire per day ¹	2 dr.	O.P. 1049
215 A.D.	" "	4 dr.	B.G.U. 362
191/2 A.D.	Five donkeys going from Karanis to Memphis	10 dr., 2 ob.	Goodspeed, Gk. Pap. 30, 36, 10
	Baggage wagon per day	1½ dr.	Wilcken, G.O. 1180
Second century	Boatload of wheat from Oxyrhyn. to Alexandria	21 dr. per 100 art.	O.P. 522
236 A.D.	Freight on 250 artabae of vegetable seed carried from Arsinoe to Oxyrhynchus	100 dr. plus 1 jar of wine plus 16 dr., if boat held over 4 days at Oxyrhyn.	P.B.M. 948
Fourth century	Boatload of grain from Fayum to Alexandria	9 tal.	Mitteis, Pap. Leipzig 5
534 A.D.	Freight on 1485½ artabae of wheat from Oxyrhyn. to Alexandria	11 solidi, 3½ ceratia	O.P. 142
Third to fourth century	Carrying corpse from Great Oasis to Nile(?)	340 dr.	Grenfell, Gk. Pap. II, 77
Second century	Traveling allowance to soldier for trip from Egypt to Misenum	3 aurei	B.G.U. 423
612 A.D.	To boatmen for going from Oxyrhyn. to Alexandria to bring back an advocate	3 solidi less 12 ceratia	O.P. 151

J. MISCELLANEOUS ITEMS

Items	Date	Price	Authority
Hide, cowhide, unworked	301 A.D. ²	500 denar.	Edict. Dioclet. 8. 6a
" "	362 A.D.	75,000,000 denar.	O.P. 1057
Hay, per donkey load	100 A.D. ³	12 dr.	Fayum Towns 119
" crop on 3 arurae of land	142 A.D.	276 dr.	O.P. 728

¹ Today a donkey may be hired for 30 to 50 cents a day, the owner paying for the feed. For a donkey worth \$40.00, this is at the rate of about 1 per cent of its value per day. If we average all the second-century prices of donkeys, this rent is at a rate of a trifle over 1 per cent per day. In Diocletian's edict the rent of a laden donkey is 4 denarii per mile and of a baggage wagon 12 denarii per mile.

² In B.G.U. 655 of 215 A.D. we find a taxpayer giving 8 drachmae in money instead of furnishing one or more hides to the army.

³ In Diocletian's edict (xvii. 7) the price of hay and straw is fixed at 2 denarii for 3 pounds. In *ibid.*, xvii. 8 the price of pabulum is fixed at 1 denarius for 6 pounds.

TABLE II—*Continued*

Items	Date	Price	Authority
Straw, for 1,800 pounds	340 A.D. ¹	144 tal.	B.G.U. 21
Manure, per artaba	third century ²	4 dr.	O.P. 934
Tow, per pound	fourth century	4 tal.	Pap. Rainer
" " "	" "	1 tal., 2,000 dr.	AN 310
Red pigment (sandyx)	" "	160 tal.	O.P. 1288
Colors for painting, per xestes	second century	7 dr. to 9 dr., 1 ob.	Pap. Rainer
Aromatic oil	fourth century	4 tal.	AN 310
Acacia trees, 2 fallen	13 A.D.	8 dr.	P.B.M. 928
" " , each	188 A.D.	13 dr.	Pap. Rainer
" " , for 14	225 A.D.	1,200 dr.	AN 310
Persea tree, 1 small dried branch	13 A.D.	6 dr.	O.P. 1188
Persea tree, branch of living tree	" "	1 dr.	O.P. 1188
Persea tree, 1 branch of dried tree	" "	1 dr.	O.P. 1188
Reeds, for 1,000 bundles	2 B.C.	15 dr.	O.P. 742
Wax tablet and stylus	1 A.D.	1 ob.	O.P. 736
Water jars, per 100	113 A.D.	6 dr.	P.B.M. 1177
Purse	second to third century	1 dr.	Tebt. Pap. 337
Nails, per mina	255 A.D.	12 dr.	B.G.U. 14
Malleable bronze, for 6 lbs.	338 A.D.	1,000 denar.	O.P. 85
Wrought iron, for 100 lbs.	316 A.D.	6 tal.	O.P. 84
Perfume, dry precipitate, 1 cotyla	third century	32 dr.	O.P. 1142

¹ In Pompeii the price of straw was 5 asses per pound; see *C.I.L.*, 4, 4000.² Pliny *H.N.*, xviii. 53 gives the price of manure as 1 denarius per cartload.³ Pliny *H.N.*, xxxv. 23 gives the price of sandyx as 2½ asses per pound.